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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,491	11/14/2003	Masahiro Yatake	U 014890-5	1032
140	7590	02/27/2006	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/714,491	Applicant(s) YATAKE, MASAHIRO	
	Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 11/29/05.

The new grounds of rejection set forth below are necessitated by applicant's amendment and thus, the following action is final.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 5-10, 12-13, 15-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2000/75245 in view of WO 2001/44384.

The rejection is adequately set forth in paragraph 4 of the office action mailed 8/24/05 and is incorporated here by reference.

4. Claims 1-3, 6-8, 12-13, 15-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2001/44384 in view of WO 2000/75245.

The rejection is adequately set forth in paragraph 5 of the office action mailed 8/24/05 and is incorporated here by reference.

5. Claims 5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2001/44384 in view of WO 2000/75245 as applied to claims 1-3, 6-8, 12-13, 15-16, and 18-19

above, and further in view of either Kurabayashi et al. (U.S. 6,367,921) or Tabayashi et al. (U.S. 6,074,467).

The rejection is adequately set forth in paragraph 6 of the office action mailed 8/24/05 and is incorporated here by reference.

6. Claims 1-4, 6-8, and 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2001/44384 in view of EP 676140.

The rejection is adequately set forth in paragraph 7 of the office action mailed 8/24/05 and is incorporated here by reference.

With respect to newly added claim 21, it is noted that given that WO 2001/44384 in combination with EP 676140 discloses ink as presently claimed including octylisothiazolone and methylisothiazolone in amounts as presently claimed, it is clear that the ink would intrinsically have better storage stability than ink without the octylisothiazolone and methylisothiazolone.

7. Claims 5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2001/44384 in view of EP 676140 as applied to claims 1-4, 6-8, and 12-20 above, and further in view of either Kurabayashi et al. (U.S. 6,367,921) or Tabayashi et al. (U.S. 6,074,467).

The rejection is adequately set forth in paragraph 8 of the office action mailed 8/24/05 and is incorporated here by reference.

Response to Arguments

8. Applicant's arguments filed 11/29/05 have been fully considered but they are not persuasive.

Applicant argues that there is no motivation to combine Komatsu et al. with Miyabayashi et al. given that one of skill in the art striving for high dispersion stability would not have incorporated MIT and OIT in ink comprising encapsulated pigment given the unpredictability of the effect of MIT and OIT on dispersion stability. As evidence to support this position, applicant points tables 3-4 of the present specification. Applicant argues that the tables shown that the stability of ink comprising encapsulated pigment is more sensitive to the effects of MIT and OIT than is the stability of a surface treated pigment.

However, it is noted that the data set forth in tables 3-4 is not persuasive given that there is not proper side-by-side comparison between ink within the scope of the present claims and ink outside the scope of the present claims. Specifically, tables 3-4 compare ink within the scope of the present claims, i.e. comprising encapsulated pigment, with ink outside the scope of the present claims, i.e. comprising surface treated pigment. It is shown that ink of the present invention is more sensitive to the effects of MIT and OIT. However, there is not proper side-by-side comparison between the inventive inks and the comparative ink given that the inventive ink comprises macromolecular fine particle solution while the comparative ink does not. Thus, it is not clear if the differences between the inventive inks and the comparative inks is due to the encapsulated pigment or due to the presence of the macromolecular fine particle solution.

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Applicant also argues that there are no examples in Komatsu et al. of ink containing MIT and OIT.

However, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others”, *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). A fair reading of the reference as a whole discloses that it is preferable to use OIT and MIT as the alkylisothiazolone (col.29, lines 28-29).

Applicant also argues that ink containing surface treated pigment as disclosed by Komatsu et al. would not have the same need for antiseptics as ink comprising pigment dispersed with polymer.

However, it is significant to note that Komatsu et al. disclose the use of 0.01-0.5% MIT and OIT which overlaps the combined amount of MIT and OIT presently claimed.

Applicant also argues that given that Komatsu et al. utilize surface treated pigment there is no motivation to combine Miyabayashi et al. with Komatsu et al. given that there is no motivation for the ink to utilize MIT and OIT with encapsulated pigment.

However, given that Komatsu et al. disclose that MIT and OIT are used in combination with surface treated pigment and given that Miyabayashi et al. disclose the equivalence and interchangeability of ink containing surface treated pigment and ink containing encapsulated pigment, it therefore would have been obvious to one of ordinary skill in the art to utilize MIT and OIT disclosed by Komatsu et al. in the ink of Miyabayashi et al.

Applicant also argues that given that Miyabayashi et al. disclose that the described encapsulated pigment is beneficial to dispersion stability, this teaches away from the use of antiseptics that could adversely affect such stability. However, applicants have offered no evidence to support their position that the use of antiseptics adversely affects the stability of inks comprising encapsulated pigment. While applicants point to tables 3-4 of the present specification, it is the examiner's position, as described above, that such data is not persuasive given that there is not proper side-by-side comparison between ink within the scope of the present claims and inks outside the scope of the present claims.

Applicant also argues that EP 676140 is not a relevant reference against the present claims given that there is no disclosure in EP 676140 of inks and thus, no reasonable expectation that MIT and OIT could be added to ink composition comprising pigment without adversely affecting the dispersion stability thereof.

However, applicant is reminded that according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." EP 676140 is, therefore, a reasonably pertinent reference, because it teaches that the combination of MIT and OIT controls microbial growth in

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composition comprising water and polymer emulsion, which is a function especially pertinent to the invention at hand.

Further, given that EP 676140 discloses the use of 1-400 ppm blend of MIT and OIT wherein the ratio of MIT and OIT is 1/20 to 20/1, i.e. 19-381 ppm MIT and 381-19 ppm OIT, which amounts fall squarely within those presently claimed, it would have been natural for one of ordinary skill in the art to infer that the use of MIT and OIT in the ink of Miyabayashi et al. would not adversely effect the dispersion stability of the ink.

Applicant points to the comparative data set forth in Table 1 of the present specification which compares ink comprising MIT and OIT with ink comprising either MIT or OIT. It is shown that ink of the present invention is superior in terms of storage stability and discharge stability. However, the results are not unexpected or surprising given that one of ordinary skill in the art would expect ink with more antiseptic to have better properties. That is, the data compares ink within the scope of the represent claims, i.e. comprising 0.03% OIT and MIT, with ink outside the scope of the present claims, i.e. comprising either 0.01% MIT or 0.02% OIT. Given that inks within the scope of the present claims contain more antiseptic, i.e. 0.03% vs. 0.01% or 0.02%, one would expect such ink to exhibit better properties.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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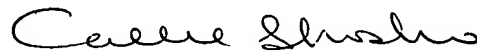
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
2/17/06